THE 4TH INTERNATIONAL CONFERENCE ON ADVANCED CONCEPTS ON MECHANICAL ENGINEERING

June 17-18, 2010

Iasi, ROMANIA

CONFERENCE PROGRAM

Conference Chairman

Cezar OPRISAN, Romania

International Steering Committee

Scientific Committee

Local Organising Committee

Chair

Ioan DOROFTEI

Corneliu COMANDAR
Danuta COZMA
Flavian FARCAS
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Ion OANCEA
Carmen Ema PANAITE
Aristotel POPESCU
Gabriel URSESCU

Thursday, June 17, 2010

Location: TU of Iasi Conference Room

09:00-10:00	Registration
10:00 – 11:00	Opening Session. Chairman: Prof. Cezar OPRISAN
11:00 – 13:00	Plenary Session. Chairman: Prof. Spiridon CRETU
11:00 – 11:30	**PETER LORENZ**, CONSTANTIN I. BĂRBÎNȚĂ, Optimierung des schienenverkehrs durch achsen mit värenderlichen spurweiten-system lobar
11:30 – 12:00	CONSTANTIN-IOAN BĂRBÎNȚĂ, PETER LORENZ, **SPIRIDON CREȚU**, The Pressure Distribution in the Wheel-Rail Contact Using Measured Profiles
12:00 – 12:30	**ERWIN-CHRISTIAN LOVASZ**, DAN PERJU, IOSIF CĂRĂBAŞ, KARL-HEINZ MODLER, EUGEN SEVER ZĂBAVĂ, Basic Circle Radius of the Cam Mechanism with Flat Oscillating Follower
12:30 – 13:00	ADRIAN HOMUTESCU, Company presentation: **CONTINENTAL ROMANIA**
13:00 – 15:00	Lunch

Location: Machine Design and Mechatronics Department

Machine Design, Tribology and Surface Engineering, CAD and Mechanical Vibrations, Mechatronics

Chairman: Prof. Peter LORENZ, Prof. Spiridon CRETU

15:00 – 15:15	MIHAI AVRAM, CONSTANTIN BUCSAN, VICTOR CONSTANTIN, Hardware and Software Development of a Pneutronic Positioning Unit.
15:15 – 15:30	CĂTĂLINA AXINTE, DANIELA-LUCIA CHICET, IONUȚ-LUCIAN BISTRICIANU, CORNELIU MUNTEANU, Materials Specific to Gears Used in Automotive Industry
15:30 – 15:45	MIHAELA RODICA BĂLAN, CIPRIAN STAMATE, MARCELIN BENCHEA, ALINA DUMITRAŞCU, Experimental Study of Friction in Dry Micro Rough Contacts
15:45 – 16:00	CONSTANTIN-IOAN BĂRBÎNȚĂ, PETER LORENZ, SPIRIDON CREȚU, The Lateral Shift of the Wheelset and Pressure Distribution in the Wheel-Rail Contact
16:00 – 16:15	MIHAELA BARHALESCU, CONSTANTIN DUMITRACHE, Corrosion Resistance of Superficial Layers in Sea Water.
16:15 – 16:30	IONUȚ LUCIAN BISTRICIANU, DANIELA LUCIA CHICET, CĂTĂLINA AXINTE, CORNELIU MUNTEANU, Wear Test and Sem Analysis for Cp-Ti Air Oxidised Samples.

16:30 – 16:45	ION BOSTAN, PETER LORENZ, VALERIU DULGHERU, EUGENIU RUSU, VBA Role in Generating Precessional Wheel Tooth Profile in Solid Works.
16:45 – 17:00	CARMEN BUJOREANU, BARBU DRĂGAN, MIHAELA RODICA BĂLAN, A Kinematics Model for Ball Bearings with Scuffing Risk.
17:00 – 17:15	Cofee Break
17:15 – 17:30	W. CALLES, M. DEGAND, M. KALAN, A. LELLIG, Einfluss der wärmebehandlung auf die lebensdauer von komponenten aus dem werkzeugstahl X155CrMoV12
17:30 – 17:45	VLAD CÂRLESCU, GHEORGHE PRISĂCARU, DUMITRU OLARU MIHAELA ALEXANDRU, GEORGE STIUBIANU, Micro-Displacements Study of Some Dielectric Elastomer Electroactive Polymers as Potential Actuators
17:45 - 18:00	DANIELA-LUCIA CHICET, IONUȚ-LUCIAN BISTRICIANU, CĂTĂLINA AXINTE, CORNELIU MUNTEANU, Aps Coatings Used to Improve Life of Bearings.
18:00 – 18:15	FLORINA CARMEN CIORNEI, STELIAN ALACI, DELIA CERLINCA, ILIE MUSCA, LUMINITA IRIMESCU, OVIDIU RUSU, Some Aspects Regarding Cylindrical Bellows Behaviour Under Various Loads.
18:15 - 18:30	FLORINA CARMEN CIORNEI, STELIAN ALACI, DELIA CERLINCA, GHEORGHE FRUNZĂ, LUMINIȚA IRIMESCU, SIMION PATRAŞ-CICEU , Finite Element Study of Rectangular Corrugated Bellows under Compression and Bending.
18:30 – 18:45	NICOLAE CRACIUNOIU, DANEL SEMENESCU, NICOLAE DUMITRU, ION MANEA, On the Modeling and Analysis of the Directory Apparatus-Part of an Hydraulic Turbine
18:45 – 19:00	DRĂGAN BARBU, CARMEN BUJOREANU, CEZAR OPRIŞAN, The Active Vibration Control in the Mechatronic Systems

Location: Theory of Mechanisms and Robotics Department

Theory of Mechanisms and Machinery, Robotics

Chairman: Prof. Erwin-Christian LOVASZ, Prof. Virgil ATANASIU

15:00 – 15:15	HANS BERNHARD WOYAND, Modern Software Methods for the Simulation of Planar Mechanisms
15:15 – 15:30	STELIAN ALACI, FLORINA CARMEN CIORNEI, CONSTANTIN FILOTE, DUMITRU AMARANDEI,

	LUMINITA IRIMESCU DELIA CERLINCA, Numerical versus Analitycal Results in Kinematics of RCCC Mechanism
15:30 – 15:45	STELIAN ALACI, FLORINA CARMEN CIORNEI, CONSTANTIN FILOTE, DUMITRU AMARANDEI, LUMINITA IRIMESCU DELIA CERLINCA, FEM Analysis of Wobble Plate Mechanism
15:45 – 16:00	VIRGIL ATANASIU, CRISTINA ROZMARIN, DUMITRU LEOHCHI, MIHAI-RADU IACOB, Robust Design for Minimization of Dynamic Transmission Error of Spur Gear Pairs
16:00 – 16:15	AHMED ABU HANIEH, JAMAL SIAM, Sun Tracking Smart System
16:15 – 16:30	ADRIAN BRUJA, MARIAN DIMA, FRÂNCU CĂTĂLIN, Determining Precessional Gearing Profile Equations Based on the Fundamental Law of Gearing.
16:30 – 16:45	FLORENTIN BUIUM, CEZAR OPRIŞAN, CEZAR DUCA, IOAN DOROFTEI, About Workspace Shape of an 3-RRR Planar Parallel Mechanism
16:45 – 17:00	ADRIANA COMANESCU, DINU COMANESCU, ILEANA DUGAESESCU, About the Fixed Sequence Walking Microrobots Modelling
17:00 – 17:15	Cofee Break
17:15 – 17:30	CEZAR DUCA, FLORENTIN BUIUM, Questions about Self-Blocking of Mechanisms
17:30 – 17:45	DUMITRU LEOHCHI, EUGEN MERTICARU, The Direct and Inverse Simulation of the DC Motor Speed Control
17:45 - 18:00	STELIAN MIHALCEA, NICOLAE PANDREA, A Kinematic Analysis of the Valve Timing Mechanism with Three Elements and Continuous Valve Lift
18:00 – 18:15	SĂNDEL OGARU, NICOLAE PANDREA, The Numerical Computation of the Multi-Link Five Point Suspension.

Location: Strength of Materials Department

Mechanics of Deformable Bodies

Chairman: Prof. Hans-Bernhard WOYAND, Prof. Dorel LEON

15:00 – 15:15	MIHAIL AIGNĂTOAIE, HANS-BERNHARD WOYAND, PAVOL SEDLAR, FEA Study of the Sphere - Elastic Plane Impact.
15:15 – 15:30	MIHAIL AIGNĂTOAIE, FEA Study of the Stress Concentration in a U-Shaped Notch Modelled with Circular and Elliptical Arcs.

15:30 – 15:45	MONICA ANDRONACHE, NORINA FORNA, PAUL BÂRSĂNESCU, BOGDAN LEIȚOIU, Study of Stress and Strain Distribution on a Partial Clasp Dental Prostheses
15:45 – 16:00	MONICA ANDRONACHE, NORINA FORNA, PAUL BÂRSĂNESCU, BOGDAN LEIȚOIU, Study of Stress on the Prosthetic Field Elements by Finite Element Method
16:00 – 16:15	COSTICĂ ATANASIU, ŞTEFAN SOROHAN, Numerical Simulation for Stability Analysis of the Longerons of a Metallic Orthotropic Plate
16:15 – 16:30	CIPRIAN ATĂNĂSOAEI, VIOREL GOANȚĂ, The “Fault Tree” Diagram for the Calculation of the Occurrence Probability of Faults in Ceramic Materials
16:30 – 16:45	DORU CANTEMIR, PAUL BÂRSĂNESCU, SERGIU GHERASIM, Finite Element Modelling of Residual Stresses in Monel Butt-Plate Welding
16:45 – 17:00	VASILE CIOFOAIA, CAMELIA CERBU, FLORIN DOGARU, SORIN POPA, On the Determination of the Macromechanical Characteristics of Composite Materials by Three-Point Flexure Tests
17:00 – 17:15	Cofee Break
17:15 – 17:30	LIVIU COMAN, Analytical Considerations Regarding Crack Emerging in Low Carbon Steel
17:30 – 17:45	LIVIU COMAN, Particular Cases of Load in Low Carbon Steel Cracking
17:45 - 18:00	CORNELIU COMANDAR, DOREL LEON, NICUŞOR AMARIEI, CONSTANTIN DUMITRACHE, Creep Test Results and Interpolations for a Low Alloy Steel
18:00 – 18:15	CORNELIU COMANDAR, DOREL LEON, NICUŞOR AMARIEI, CONSTANTIN DUMITRACHE, The Equation of Plastic Strain Accumulation During the Creep of a Low Alloy Steel
18:15 - 18:30	ALEXANDRA DENISA DANCIU, HORAȚIU ALIN MOCIRAN, Estimation of Modelling Errors
18:30 – 18:45	ALEXANDRA DENISA DANCIU, HORAȚIU ALIN MOCIRAN, Shell Elements and Their Application in Structural Mechanics
18:45 – 19:00	ION DUMITRU, LORAND KUN, MIHAI HLUŞCU, Life-Time Estimation of an Autofrettaged Cylinder under Repeated Dynamic Pressure

Location: Automotive and Internal Combustion Engines Department

Automotive and Internal Combustion Engines

Chairman: Prof. Radu GAIGINSCHI, Prof. Eugen GOLGOTIU

15:00 – 15:15	CLAUDIU BUTNARU, Progress in Homogeneous Charge Compresion Ignition (HCCI)
15:15 – 15:30	NICOLAE BUZBUCHI, FEIZA MEMET, Internal Combustion Engine Simulation in Training System Stage
15:30 – 15:45	NICOLAE BUZBUCHI, LIVIU STAN, New Concepts on the Dynamic Behavior of Marine Diesel Power Plant
15:45 – 16:00	DANIEL CHIRIȚĂ, Aspects Regarding Kadenacy Influnce on Filling Effect in Two-Stroke Engine M 111
16:00 – 16:15	CRISTINA DANASEL, Study of the Influence of the Firewall Shape and Material on the Structure Borne Noise Inside a Car's Cabin
16:15 – 16:30	CRISTI IRIMIA, DAN PREDICA, EMILAN VALERIU PAPA, MIHAIL GROVU, CATALIN VASILIU, Analysing Nvh Performance in the Design Process Using Virtual Multibody Simulation
16:30 – 16:45	CRISTI IRIMIA, MIHAIL GROVU, DAN PREDICA, CATALIN VASILIU, Response and Contribution Analysis in the Virtual NVH Engineering Process.
16:45 – 17:00	CONSTANTIN PANA, NICULAE NEGURESCU, MARCEL GINU POPA, ALEXANDRU CERNAT, Investigations Regarding the Use of the Turbocharging and Bioethanol at Si Engines
17:00 – 17:15	Cofee Break
17:15 – 17:30	MARIUS RECEANU, GHEORGHE PLEŞU, DĂSCĂLESCU SPIRIDON- DAN, RADU DROSESCU, Simulation of the Dynamic Model for Car-Engine Cooling System
17:30 – 17:45	MARIUS RECEANU, SPIRIDON- DAN DĂSCĂLESCU, GHEORGHE PLEŞU, ADRIAN SACHELARIE, Fuel Economy of the Car-Engine Using the Variation of Cooling Air Flow
17:45 - 18:00	ADRIAN SABĂU, LIVIU-CONSTANTIN STAN, Quasi 3d Code for Combustion Modelling in Diesel Engine
18:00 – 18:15	ADRIAN SABĂU, LIVIU-CONSTANTIN STAN, Model for Combustion Chemichal Reactions.
18:15 - 18:30	L. TARTAKOVSKY, V. BAYBIKOV, M. GUTMAN, D. POPESCU, M. VEINBLAT, Y. ZVIRIN, Study of Air Pollution Inside Vehicle Cabin

18:30 – 18:45	KRISZTINA UZUNEANU, EUGEN GOLGOTIU, DAN DRAGHIA, Contribution on the Study of the Evolution of the Otto Engines Pollution

Location: Applied Thermodynamics Department

Applied Thermodynamics, Heat Transfer and Renewable Energy, Thermal Systems Engineering

Chairman: Prof. Emil JUGUREANU, Prof. Gheorghe DUMITRASCU

15:00 – 15:15	ANCUTA ABRUDAN, The Thermal Stability of Structural Components
15:15 – 15:30	SHERZAD ALATRUSHI, Conversion to the Climate Conditions Specific to Iraq of Piston Engine Cooling Systems Designed to Operate in a Temperate Climate
15:30 – 15:45	SHERZAD ALATRUSHI, Experimental Research on the Conversion of Piston Engine Cooling Systems to the Climate Conditions Specific to Iraq
15:45 – 16:00	FLORIN ANIȚEI, ŞTEFANIA ROXANA BUZDUGÃ, TUDOR SAJIN, Water-Coal Dust Suspension, Alternative Fuels: Preparation and Critical Rheological Characteristics
16:00 – 16:15	FLORIN ANIȚEI, ŞTEFANIA ROXANA BUZDUGÃ, TUDOR SAJIN, Influence of Temperature on the Fluidity of Coal Dust-Water Suspension.
16:15 – 16:30	CĂTĂLIN BÎRSAN, TUDOR SAJIN, MIHAI-PUIU BERIZINȚU, NARCIS OSTAHIE, Modeling with Discharge Corona Ozone Generation in Dielectric Barrier.
16:30 – 16:45	CĂTĂLIN BÎRSAN, TUDOR SAJIN, SORIN-GABRIEL VERNICA, Electrochemical Reaction and Mecanisms Generating Ozone
16:45 – 17:00	ŞTEFANIA ROXANA BUZDUGÃ, TUDOR SAJIN, DUMITRU OLARU, FLORIN ANITEI, Viscosity and Density Dependencies of Water-Oil Emulsions on Water Content and Temperature
17:00 – 17:15	Cofee Break
17:15 – 17:30	ŞTEFANIA ROXANA BUZDUGÃ, TUDOR SAJIN, DUMITRU OLARU, FLORIN ANITEI, Determination of Mass Heat, Heat Conduction and Heat of Combustion of Water Oil Emulsion.

17:30 – 17:45	GELU COMAN, CRISTIAN IOSIFESCU, VALERIU DAMIAN, Finite Differences Analysis of Ice Formation Outside a Flat Wall
17:45 - 18:00	DANIEL DRAGOMIR-STANCIU, NAMAT ABDUL RAHMAN JARJES, EMIL JUGUREANU, Heat Storage in a Trigeneration Unit with Steam Turbine as Prime Mover
18:00 – 18:15	MARIUS GHEORGHE MĂRIAN, TUDOR SAJIN, Dimensional Analysis for a Micro Hydropower Plant on the Basis of a Gravitational Vortex
18:15 - 18:30	MARIUS GHEORGHE MĂRIAN, TUDOR SAJIN, Water Flow Through the Micro Hydroelectric Power Plant Components
18:30 – 18:45	EMIL JUGUREANU, DANIEL DRAGOMIR-STANCIU, MARIUS ATANASIU, GEORGE OVIDIU RAU, NAMAT ABDUL RAHMAN JARJES, Trigenerative System Absorbtion Cooling Machine – Ejection Cooling Machine
18:45 – 19:00	FEIZA MEMET, Thermodynamic Analysis of PEM Fuel Cells Used in the Maritime Sector

Location: Agriculture Mechanics and Food Industry Department

Technologies in Agriculture and Food Processing

Chairman: Prof. Sorin-Stefan BIRIS, Prof. Danuta COZMA

15:00 – 15:15	OVIDIU BALAN, CONSTANTINA BALAN, Research on Oriented Planting of Chives
15:15 – 15:30	OVIDIU BALAN, Contributions Regarding the Improvement of the Quality of Transplanting Nursery Plants.
15:30 – 15:45	MIRCEA BERNIC, Theoretical and Experimental Suppositions Regarding the Drying Process of Oily Products When Using Impulse Internal Heating Source
15:45 – 16:00	SORIN-ŞTEFAN BIRIŞ, NICOLETA UNGUREANU, VALENTIN VLĂDUŢ, GHEORGHE VOICU, MARIANA MANEA, VASILE CRĂCIUN, FEM Model for Determining the Influence of Tire Pressure on Artificial Compaction of Agricultural Soil
16:00 – 16:15	SORIN-ŞTEFAN BIRIŞ, NICOLETA UNGUREANU, GIGEL PARASCHIV, MARIANA MANEA, MĂDĂLINA TUDOSIE, SORIN BUNGESCU, Analysis of Stresses and Strains Distribution in the Rods of Tractor Suspension Mechanism Using Finite Elements Method
16:15 – 16:30	DĂNUŢĂ COZMA, OANA-ELIZA BĂETU, Quick Wheat Conditioning and the Influence of Hydrothermal Treatment on Gluten Content

16:30 – 16:45	DĂNUȚĂ COZMA, OANA-ELIZA BĂETU, Researches Possibilities Concerning the Wear of the Working Tools Used for Pressing Oil Seeds.
16:45 – 17:00	EUGEN ENCULESCU, DRAGOS PARASCHIV, IONUT LUCIAN BISTRICEANU, DANIELA CHICET, POPA SORIN, Influence of Heat Treatment on Microstructure of the Material Used to Manufacture Blades in Machines for Harvesting Grain, Plants and Fodder.
17:00 – 17:15	Cofee Break
17:15 – 17:30	ION LACUSTĂ, VALENTIN SLIUSARENCO, GRIGORE GANEA, Technology and Equipment for the Production Biofuel From Oily Plants
17:30 – 17:45	ION LĂCUSTA, BEŞLEAGĂ IG., BANARI ED., Use of Biofuels in Compression Ignition Engines
17:45 - 18:00	EMILIAN MOŞNEGUȚU, VALENTIN NEDEFF, MIHAIL RISTEA, MIRELA PANAINTE, CARMEN SAVIN, Research on Aerodynamic Separation of Mixtures Solids
18:00 – 18:15	EROL MURAD, CRISTIAN SIMA, GEORGETA HARAGA, VICTOR-VIOREL SAFTA, Reduction of Final Humidity Dispersion of Bodies in Convective Drying Process
18:15 - 18:30	EROL MURAD, EDMOND MAICAN, MIHAELA FLORENTINA DAVID, Algorithm for an Optimal Sizing of Different Variants of Blended Wines
18:30 – 18:45	VASILE NECULAIASA, RUSU TITI, Research Regarding the Growth of the Technological Effect on Eliminating the Impurities From the Wheat Mass with the Use of the Monocyclone Type Mana.
18:45 – 19:00	MIRELA PANAINTE, VALENTIN NEDEFF, CIPRIAN OLARU, MOŞNEGUȚU EMILIAN, CARMEN SAVIN, BOGDAN MĂCĂRESCU, Study Regarding the Influence of Cutting Bodies Surface State on Energy Consumption in Grinding Process of Vegetable Products with Hard Texture
19:30 -	Conference dinner, RAMADA Restaurant

Friday, June 18, 2010

Location: Machine Design and Mechatronics Department

Machine Design, Tribology and Surface Engineering, CAD and Mechanical Vibrations, Mechatronics

Chairman: Prof. W. CALLES, Prof. Dumitru OLARU

09:00 - 9:15	MIHAELA ISTRATE, CONSTANTIN ONESCU, NICOLAE POPA, BARBU DRĂGAN, Considerations Regarding the Geometrical Optimisation of a Mechanical Face Seal
09:15 - 9:30	VIOREL PALEU, SPIRIDON CRETU, The Behaviour of Kerosene in Hybrid Concentrated Contacts
09:30 - 9:45	GABRIEL POPESCU, Theoretical and Experimental Investigation on the Influence of Fit Pressure in Elastic-Plastic Rolling Contact
09:45 - 10:00	GABRIEL POPESCU, Elastic-Plastic Rolling Contact of a Sphere and Periodic Real Rough Surfaces
10:00 - 10:15	DANIEL REZMIREŞ, VASILE BOCĂNEŢ, ALFREDO MONFARDINI, CRISTINA RACOCEA, CEZAR RACOCEA, Free Angle of Misalignelent in Ball Bearings
10:15 - 10:30	DANIEL REZMIREŞ, VASILE BOCĂNEŢ, ALFREDO MONFARDINI, CRISTINA RACOCEA, CEZAR RACOCEA, Slewing Bearing Lubrication & Maintenance.
10:30 - 10:45	DANIEL REZMIREŞ, VASILE BOCĂNEŢ, ALFREDO MONFARDINI, CRISTINA RACOCEA, CEZAR RACOCEA, Non-Diametrical Four Point Contact Ball Bearings
10:45 - 11:00	PETRE LUCIAN SEICIU, IOAN DAN FILIPOIU, TIBERIU LAURIAN, Mechatronic System for Gait Simulation – SIMESIM.
11:00 – 11:15	Cofee Break
11:15 - 11:30	PETRE STAN, The Spectral Density of the Response for Random Vibration of Non-Linear Oscillators
11:30 - 11:45	CRISTINA STĂNESCU, LUCIAN TUDOSE, DUMITRU POP, NICOLAE URSU-FISCHER, Rolling Movement Simulation of a 21 M Boom Spray
11:45 - 12:00	CRISTEL ŞTIRBU, ŞTEFAN GRIGORAŞ, Tapered Threaded Joint for Tubing and Casing.Theoretical Considerations and Design Problems .
12:00 - 12:15	ANA URZICĂ, RODICA BĂLAN, SPIRIDON CREŢU, Simulation Methods of Gaussian Surfaces .

Location: Theory of Mechanisms and Robotics Department

Theory of Mechanisms and Machinery, Robotics

Chairman: Prof. Cezar OPRISAN

09:00 - 9:15	DĂNUȚ RECEANU, CEZAR OPRIŞAN, EMIL BUDESCU, Method for the Design of Servomechanism Position Control.
09:15 – 09:30	MARIUS RECEANU, GHEORGHE PLEŞU, SPIRIDON DAN DĂSCĂLESCU, The Air Flow Control for a Car-Engine Cooling System
09:30 - 9:45	CRISTINA GABRIELA ROZMARIN, SID AHMED BERRABAH, Autonomous Robot Navigation Based on Fuzzy Logic and Reinforcement Learning
09:45 - 10:00	BOGDAN STIRBU, Constitutive Models of Shape Memory Alloys - A Review

Location: Strength of Materials Department

Mechanics of Deformable Bodies

Chairman: Prof. Petre TEODORESCU, Prof. Corneliu COMANDAR

09:00 - 9:15	VIOREL GOANȚĂ, CIPRIAN ATĂNĂSOAEI, The "Fault Tree" Diagram for the Calculation of the Occurrence Probability of Faults in Ceramic Materials
09:15 - 9:30	RAIMOND GRIMBERG, ADRIANA SAVIN, FILIPE SILVA, PAUL DORU BÂRSĂNESCU, PETRICĂ DANIEL SĂLĂVĂSTRU, ROZINA STEIGMANN, Degradation of CFRP with Woven Fabric Reinforcement and PPS as Matrix Due Water Action
09:30 - 9:45	MIRCEA IEREMIA, EMIL VOICULESCU, Design Based on Performance. Reabilitation of an Existing Hospital Construction Situated in a High Risk Seismic Area
09:45 - 10:00	ANDREAS IOANNOU, MIRCEA MODIGA, ALINA DIMACHE, Ultimate Longitudinal Strength of a Corrosion Bulk Carrier Hull
10:00 - 10:15	HORAȚIU-ALIN MOCIRAN, ALEXANDRA-DENISA DANCIU, Effectiveness of Viscoelastic Dampers in Mitigating Seismic Response of a Single Degree of Freedom Structure
10:15 - 10:30	HORAȚIU-ALIN MOCIRAN, ALEXANDRA-DENISA DANCIU, Evaluation of Seismic Energy Response of a Single Degree of Freedom Structure Equipped with Viscous Dampers
10:30 - 10:45	VALERIA MOŞNEGUȚU, VETURIA CHIROIU, MIHAI POPESCU, On the Squeaking of the Ceramic on Ceramic Total Hip Prosthesis

10:45 - 11:00	VASILE NASTASESCU, Numerical Modeling of Some Specific Tests of Plastics Materials
11:00 – 11:15	Cofee Break
11:15 - 11:30	IONEL RUSU, VASILE CIOFOAIA, On the Approach of the Bending of Thin Circular Plates with Large Displacements
11:30 - 11:45	LAURENȚIU SLĂTINEANU, MARGARETA COTEAȚĂ, OANA DODUN, NICOLAE POP, IRINA BEŞLIU GRIGORAŞ, Plastic Deformation of Bodies Under the Action of the Laser Beam
11:45 - 12:00	PETRE P. TEODORESCU, LIGIA MUNTEANU, VETURIA CHIROIU, DAN DUMITRIU, On the Simulation of the Nanoindentation Technique with Application to the Buckling of Carbon Nanotubes
12:00 - 12:15	GEORGE VEZEANU, A Simple Semi-Active Control Aproach for Multistorey Steel Structrures in Seismic Conditions of Romania
12:15 - 12:30	ALEX B. WALDAUER, HEIDI P. FEIGENBAUM, CONSTANTIN CIOCANEL, Magnetic Shape Memory Alloys Under Complex Load Paths
12:30 - 12:45	HANS-BERNHARD WOYAND, MIHAIL AIGNATOAIE, Reduction of Notch Stresses Using Simplified Geometric Design

Location: Applied Thermodynamics Department

Applied Thermodynamics, Heat Transfer and Renewable Energy, Thermal Systems Engineering

Chairman: Prof. Aristotel POPESCU

09:00 - 9:15	DRAGOŞ-IULIAN NEDELCU, TUDOR SAJIN, NARCIS OSTAHIE, Dimensional Analysis of the Wave Energy Conversion Process
09:15 - 9:30	I. OPREA, Assessment of Reciprocating Compressors Efficiency
09:30 - 9:45	CONSTANTIN NARCIS OSTAHIE, TUDOR SAJIN, DRAGOŞ IULIAN NEDELCU, Dimensional Analysis for Electrostatic Oil Cleaner Process
09:45 - 10:00	CONSTANTIN NARCIS OSTAHIE, TUDOR SAJIN, CĂTĂLIN BÎRSAN, Electric Field Repartition in Dielectric Liquid-Particle Disperse System
10:00 - 10:15	VIOREL POPA, ALEXANDRU SERBAN, Novel Alternative Processes for Production of High Pressure Nitrogen

10:15 - 10:30	VIOREL POPA, CAMELIA POPA, Entropy Production in Regenerative Process
10:30 - 10:45	LIVIU-CONSTANTIN STAN, ADRIAN SABAU, FEA Advanced Algorithms in the Development of the Marine Gas Turbine
10:45 - 11:00	LIVIU-CONSTANTIN STAN, ADRIAN SABAU, The Numerical Investigation of the Gas-Dynamic Processes in Marine Gas Turbines .
11:00 – 11:15	Cofee Break
11:15 - 11:30	MUAFAG SULEIMAN TARAWNEH, Effect of Pressure and Temperature on the Performance of a Simple Rankine Cycle
11:30 - 11:45	HARALAMBIE-MIHAIL VARTOLOMEI, Algorithm for Theoretical Research Regarding the Fluid Flows Through Heat Nozzles
11:45 - 12:00	HARALAMBIE-MIHAIL VARTOLOMEI, The Results of the Research with Mathematical Modeling of the Fluids Flow Through Heat Nozzles
12:00 - 12:15	SORIN-GABRIEL VERNICA, TUDOR SAJIN, ANETA HAZI, CĂTĂLIN BÎRSAN, Thermodynamic Analysis of Gas Turbine Plant with External Heat Recovery
12:15 - 12:30	SORIN-GABRIEL VERNICA, TUDOR SAJIN, Dimensional Analysis of the Processes in Gas Turbine Power Plant

Location: Agriculture Mechanics and Food Industry Department

Technologies in Agriculture and Food Processing

Chairman: Prof. Gheorghe VOICU, Prof. Vasile NECULAIASA

09:00 - 9:15	C.C. PUNGUȚĂ., BONTAS I., NECULĂIASA V., COZMA D., The Effects of Pulsed Electric Field on Bacteria Inactivation From Apples Juices.
09:15 - 9:30	TITI RUSU, DĂNUȚĂ COZMA, VASILE NECULĂIASA, Research Regarding the Determination of Aerodynamic Properties of the Intermediary Products Resulting from the Heat Milling Process.
09:30 - 9:45	TITI RUSU, VASILE NECULAIASA, Research Regarding the Influence of Wheat Conditioning Methods on the Quality of Flour and Bakery Products.
09:45 - 10:00	TITI RUSU, VASILE NECULAIASA, RESEARCH REGARDING THE INFLUENCE OF THE Inclination Angle of

	the Sorters' Cylinders on the Technological Effect of Cleaning the Wheat Impurities
10:00 - 10:15	CARMEN SAVIN, VALENTIN NEDEFF, VALENTIN ZICHIL, ALEXANDRU IRINEL AMBĂRUȘ, MIRELA PANAINTE, EMILIAN MOŞNEGUȚU, Numerical Analysis Mixing Device Finite Element Method (FEM)
10:15 - 10:30	IOAN ȚENU, PETRU COJOCARIU, PETRU CÂRLESCU, VIRGIL VLAHIDIS, The Means of Transport Rolling System Components Impact On Soil
10:30 - 10:45	GHEORGHE VOICU, ELENA-MĂDĂLINA TUDOSIE, TUDOR CĂSĂNDROIU, SORIN-ŞTEFAN BIRIŞ, Some Aspects of Physical Properties of Seeds and Wheat Products Obtained from a Roller Mill., FEA Advanced Algorithms in the Development of the Marine Gas Turbine
10:45 - 11:00	GHEORGHE VOICU, GEORGIANA MOICEANU, GIGEL PARASCHIV, PAULA VOICU, Statistical Characterization of the Compression Properties for Agricultural Biomass Used as a Source of Biomass